

Practical Project Management

For CADD file management of AutoCAD
Civil 3D Transportation Projects.



Getting Started

SR7 Pilot Project District 4



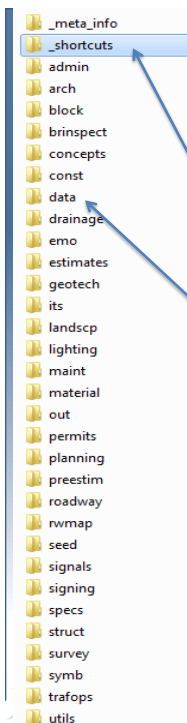
Storing the Project

•Best Choice – Autodesk Vault

- Allows users to checkout files and provides **backup** and optionally revision control.
- Working files are on the users local drive for optimal performance.
- Recognizes Data Shortcuts

•Second Best – Shared network

- Easy to setup, no learning curve
- Fast network connection important



FDOT Project Structure

Essential Folders of the Civil 3D State Kit

_shortcuts

(who doesn't **love** a shortcut)

data

contains FDOT Master Sheet Set Template.dst

Biggest items to Manage

References

Discuss and control the use of these essential data management techniques.

Affects annotation and file sharing activities.

- Data References
- External References

Corridors



Guidelines for Xrefs and Motifs

Using references as overlays prevents circular references. When AutoCAD reads the file on insert, it ignores all references listed which were overlays. It is preferable to add external references as OVERLAYS.

Insert External References into Miscellaneous layer(s). This way you can easily turn off any XREF.

- MOTIF FILES > Attached Motif drawings into **other** files as **OVERLAYS**. This will insure that the MOTIF cannot be nested in any other file. It only goes one level.
- Create the motif drawing with references as **ATTACHMENTS**. This bundles the references together.

This is how motif's should be added to any drawing that requires common underlays.

Reference Name	Status	Size	Type	Date	Saved Path
dsgnsg01	Opened	619 KB	Current	4/27/2012 9:00:50 AM	
mtplsg01	Loaded	872 KB	Overlay	4/27/2012 8:44:24 AM	..\mtplsg01.dwg
SHARED_DSGNRD02	Loaded	1.36 MB	Attach	3/7/2012 10:37:06 AM	..\roadway\SHARED_DSGNRD02.DWG
TOPORD03	Loaded	9.51 MB	Attach	4/27/2012 10:24:56 AM	..\roadway\TOPORD03.dwg
UTEXRD02	Loaded	2.09 MB	Attach	3/27/2012 2:23:18 PM	..\roadway\UTEXRD02.DWG
UTEXRD03	Loaded	828 KB	Attach	4/26/2012 6:10:33 PM	..\roadway\UTEXRD03.DWG



Reference Loading Results

➤ Insert MOTIF into design files as an **OVERLAY**.

AutoCAD loads ALL the drawings in the motif drawing because they were attachments.

➤ If the Design File is inserted into other Design files the MOTIF nested references will NOT be loaded. Drawings remain “clean” of redundant references.

DESIGN FILES requiring no other references >

The **dsgnsg01** is loaded into another design file as an OVERLAY; no other files from the MOTIF are loaded by AutoCAD.

Reference Name	Status	Size	Type	Date	Saved Path
DSGNRD02*	Opened	3.79 MB	Current	4/27/2012 1:25:44 PM	
ALGNRD04	Loaded	2.24 MB	Overlay	4/27/2012 12:05:58 PM	.\ALGNRD04.DWG
DRPRRD01	Loaded	4.76 MB	Overlay	4/25/2012 3:09:36 PM	.\DRPRRD01.DWG
dsgnsg01	Loaded	619 KB	Overlay	4/27/2012 9:00:50 AM	..signals\dsgnsg01.dwg
DSPFRD01	Loaded	779 KB	Overlay	4/27/2012 1:02:54 PM	.\DSPFRD01.DWG
PDPLRD01	Loaded	3.71 MB	Overlay	4/27/2012 1:13:43 PM	.\PDPLRD01.DWG
x110639_design	Loaded	579 KB	Overlay	3/26/2012 5:52:46 PM	.\x110639_design.DWG
TOPORD01	Loaded	10.9 MB	Overlay	1/31/2012 4:20:30 PM	..\survey\TOPORD01.DWG
TOPORD03	Loaded	9.51 MB	Overlay	4/27/2012 10:24:56 AM	.\TOPORD03.dwg



Data References and Xrefs

Little realized fact Data References are like bunnies.

➤ Data References do not nest and carry through ALL External References.

➤ Xreference Layers Can be turned off containing Data Reference.

➤ Alignment objects requiring to be turned off need separate layer assignments



Important things to know about Corridors

- Corridors are shared using Xrefs
 - Only allows the ability to create Sample Lines, Sections, Section Views and Materials Quantities
 - Cross Project Object interaction with Corridors is available by creating Alignments, Profiles, and Surfaces from the Corridor and sharing as Data Shortcuts
- Corridors are unique and can only be shared with outside organizations if they use Civil 3D that accepts the current version of the DWG file or exchange geometry using LandXML.
- Keep good project organization.
- Corridors are used to Create Proposed surfaces. Surfaces are used for many things, including Materials Quantities and Section Views. It is very important to get good accurate Corridor (etc) surfaces so pay close attention to the surfaces as they are created.



Managing the Corridor

- Corridors can become HUGE. Managing them is imperative:
 - Do not try to put a HUGE Corridor with multiple intersections in one Corridor. Break it up.
 - Keep major intersections separate Corridors.

